AMENDMENTS TO THE CLAIMS

Claims 1-45 (Canceled)

46. (Currently Amended) A polymer compound comprising a monomeric unit having a polycyclic group at a side chain, wherein all hydrogen atoms on the ring of the polycyclic group are fluorinated and the polycyclic group has a transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1}.

47. (New) The polymer compound according to claim 46, wherein the polycyclic group is an adamantyl group.

48. (New) The polymer compound according to claim 46, wherein the monomeric unit is a unit derived from acrylic ester or methacrylic ester.

49. (New) The polymer compound according to claim 46, further comprising a second monomeric unit.

50. (New) The polymer compound according to claim 49, wherein the second monomeric unit has an acid dissociable group.

51. (New) The polymer compound according to claim 49, wherein the second monomeric group is a monomeric unit derived from acrylic ester or methacrylic ester.

52. (New) A polymer compound comprising a monomeric unit having an alicyclic group at a side chain, wherein the alicyclic group is highly fluorinated and has transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1} and, wherein the alicyclic group has a hydrophilic group on a ring.

53. (New) A polymer compound according to claim 52 wherein the alicyclic group is an adamantyl group.

54. (New) A polymer compound according to claim 52 wherein the monomeric unit is derived from an acrylic ester or a methacrylic ester.

55. (New) A polymer compound comprising a monomeric unit having an alicyclic group at a side chain, wherein the alicyclic group is highly fluorinated and has transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1} and wherein the monomeric unit is a unit derived from vinyl ether.

56. (New) A polymer compound comprising a monomeric unit having a polycyclic group at a side chain, wherein the polycyclic group is highly fluorinated and has transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1} and said polymer further comprising a second monomeric unit, wherein the second monomeric unit has an acid insoluble group.

57. (New) A polymer compound comprising a monomeric unit having an alicyclic group at a side chain, wherein the alicyclic group is highly fluorinated and has transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1} and wherein the alicyclic group has a hydrophilic group on a ring and said polymer further comprising a second monomeric unit, wherein the second monomeric unit has an acid insoluble group.

58. (New) A polymer compound comprising a monomeric unit having an alicyclic group at a side chain, wherein the alicyclic group is highly fluorinated and has transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1},

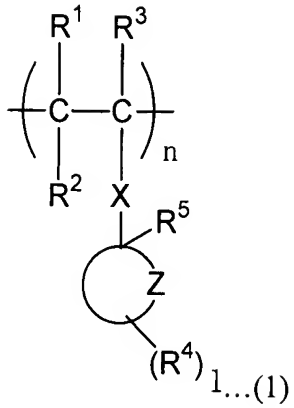
wherein the monomeric unit is a unit derived from vinyl ether and said polymer further comprising a second monomeric unit, wherein the second monomeric unit has an acid insoluble group.

59. (New) A polymer compound comprising a monomeric unit having a polycyclic group at a side chain, wherein the polycyclic group is highly fluorinated and has transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1} and said polymer further comprising a second monomeric unit wherein the second monomeric unit is a monomeric unit derived from vinylic double bond.

60. (New) A polymer compound comprising a monomeric unit having an alicyclic group at a side chain, wherein the alicyclic group is highly fluorinated and has transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1}, wherein the alicyclic group has a hydrophilic group on a ring and said polymer further comprising a second monomeric unit wherein the second monomeric unit is a monomeric unit derived from a vinylic double bond.

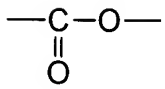
61. (New) A polymer compound comprising a monomeric unit having an alicyclic group at a side chain, wherein the alicyclic group is highly fluorinated and has transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1}, wherein the monomeric unit is a unit derived from vinyl ether and said polymer further comprising a second monomeric unit wherein the second monomeric unit is a monomeric unit derived from a vinylic double bond.

62. (New) A polymer compound having a monomeric unit represented by general formula (1)

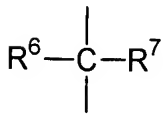


...(1)

where n is an integer; X is an ester group of carboxylic acid,



ether group (-O-), $-CH_2-O-$, or an alkylidene group,



Z enclosed by a circle is a highly fluorinated adamantyl group; R^1, R^2, R^3, R^5, R^6 and R^7 are independently one selected from the group consisting of a hydrogen atom, lower alkyl group, fluorine atom, and fluorinated lower alkyl group; l is an integer of 0 to 3; and R^4 is a hydroxyl group,

and having transparency to light of 157 nanometer wavelength represented by an adsorption coefficient equal to or less than 3.0 μm^{-1}.

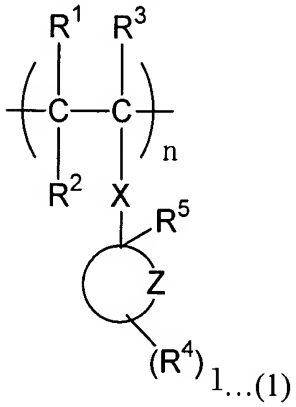
63. (New) The polymer compound according to claim 62, wherein the adamantyl group is a perfluoroadamantyl group.

64. (New) A resist composition comprising a polymer compound having a monomeric unit having a polycyclic group at a side chain, wherein all hydrogen atoms on the ring of the polycyclic group are fluorinated and said polymer compound has a transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1}.

65. (New) The resist composition according to claim 64, comprising the polymer compound as a base polymer.

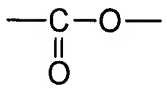
66. (New) The resist composition according to claim 64, comprising the polymer compound as a dissolution inhibitor agent.

67. (New) A resist composition comprising a polymer compound having a monomeric unit represented by general formula (1)

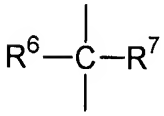


...(1)

where n is an integer; X is an ester group of carboxylic acid,



ether group (-O-), $-CH_2-O-$, or an alkylidene group,



Z enclosed by a circle is a highly fluorinated adamantyl group; R^1, R^2, R^3, R^5, R^6 and R^7 are independently one selected from the group consisting of a hydrogen atom, lower alkyl group, fluorine atom, and fluorinated lower alkyl group; l is an integer of 0 to 3; and R^4 is a hydroxyl group;

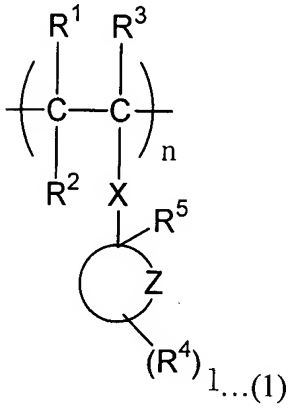
and having a transparency to light of 157 nanometer wavelength represented by an adsorption coefficient equal to or less than 3.0 μm^{-1}.

68. (New) The resist composition according to claim 67, comprising the polymer compound as a base polymer.

69. (New) The resist composition according to claim 67, comprising the polymer compound as a dissolution inhibitor agent.

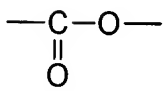
70. (New) A resist dissolution inhibitor agent comprising a polymer compound having a monomeric unit having a polycyclic group at a side chain, wherein all hydrogen atoms on the ring of the polycyclic group are fluorinated and said polymer compound has transparency to light of 157 nanometer wavelength, represented by an adsorption coefficient equal to or less than 3.0 μm^{-1}.

71. (New) A resist dissolution inhibitor agent comprising a polymer compound having a monomeric unit represented by general formula (1)

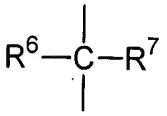


...(1)

where n is an integer; X is an ester group of carboxylic acid,



ether group (-O-), $-CH_2-O-$, or an alkylidene group,



Z enclosed by a circle is a highly fluorinated adamantyl group; R^1, R^2, R^3, R^5, R^6 and R^7

are independently one selected from the group consisting of a hydrogen atom, lower alkyl group, fluorine atom, and fluorinated lower alkyl group; l is an integer of 0 to 3; and R^4 is a hydroxyl group,

and having a transparency to light of 157 nanometer wavelength represented by an adsorption coefficient equal to or less than 3.0 μm^{-1}.